

## **ER-1: Match Airspace Design to Demands**

### **ER-1.1 Move Holding for Washington, NY Airports and PHL**

#### **Key Risks**

- None identified.

### **ER-1.2 En Route Airspace Optimization and Redesign**

#### **Key Risks**

- Several infrastructure adjustments will be needed to support new sectors, including availability of building space, ATC automation, controller position equipment, and additional frequencies. Lack of availability of these systems may negatively impact the ability to transition to new sectorization or to implement additional sectors. Limitations of the current systems, specifically the HOST computer, will limit potential efficiency of some of the proposed airspace changes.
- VTABS (VSCS Training and Backup System) capacity is limited to 50 positions in each en route center. Upgrades and expansion are not available. There are no program requirements or funding to provide needed additional capacity. Currently no additional sectors can be added to ZAU (maxed out at 50 positions); ZOB is at 48 positions.

### **ER-1.3 Implement High Altitude Redesign**

#### **Key Risks**

- Charting and real-time management of all forms of airspace usage (i.e., ATCAAs) is needed to support development of user-preferred routing that require minimal controller intervention.
- Funding for operational positions (overtime in the short-term) and ability to hire controllers for new positions will impact ability to implement the concept.
- Several infrastructure adjustments may be needed to support new sectors. Availability of these systems may impact the ability to transition to implement concept:
  - ATC Host/ERAM automation.
  - Frequencies for transitioning and new sectors; enlarging sectors would affect the ground communications infrastructure. Existing radio sites may not provide adequate coverage for the larger sectors, so two or more sites containing radios operating on the same frequency may be required.
  - There may be a need to modify surveillance linkages, and existing ground automation systems may not be capable of accepting additional inputs. Other infrastructure considerations include system adaptation and the possible use of new coordinate systems.

- Controller automation aids (e.g., URET, CRCT, TMA) may be needed to support the non-restrictive routing and transitioning to and from High Altitude airspace.

## **ER-1.4 Multiple Sector Configurations**

### **Key Risks**

- None identified.